

Serial No.: 10/632,413

RECEIVED
CENTRAL FAX CENTER

MAR 12 2007

CLAIMS LISTING:

1. (Currently amended) An implantable or insertable medical device comprising (a) a therapeutic agent and (b) a polymeric release region that controls the release of said therapeutic agent upon administration to a patient, said ~~polymer~~polymeric release region comprising a graft copolymer, which comprises a main chain and a plurality of side chains, wherein one of said main chain and said side chains corresponds to a rubbery phase within said release region at ambient temperatures, and wherein the other of said main chain and said side chains corresponds to a hard phase within said ~~release-layer~~ release region at ambient temperatures, wherein said medical device is selected from a guide wire, a balloon, a stent, a stent graft, a vascular graft, a vena cava filter, a cerebral aneurysm filler coil, a pacemaker lead, a heart valve, and a shunt.
2. (Original) The implantable or insertable medical device of claim 1, wherein said graft copolymer comprises first and second glass transition temperatures, and wherein said first glass transition temperature is below ambient temperature and wherein said second glass transition temperature is above ambient temperature.
3. (Original) The implantable or insertable medical device of claim 1, wherein said main chain corresponds to said rubbery phase within said release region and wherein said side chains correspond to said hard phase within said release region.
4. (Original) The implantable or insertable medical device of claim 3, wherein said main chain comprises a low T_g monomer and wherein said side chains comprise a high T_g monomer.
5. (Previously presented) The implantable or insertable medical device of claim 3, wherein said main chain comprises a monomer having a glass transition temperature lower than 0°C when in homopolymer form, and wherein said side chains comprise a monomer having a glass transition temperature higher than 75°C when in homopolymer form.

Serial No.: 10/632,413

6. (Currently amended) ~~The~~ An implantable or insertable medical device ~~of claim 3~~ comprising (a) a therapeutic agent and (b) a polymeric release region that controls the release of said therapeutic agent upon administration to a patient, said polymeric release region comprising a graft copolymer, which comprises a main chain and a plurality of side chains, wherein said main chain ~~corresponding~~ corresponds to said ~~a~~ rubbery phase within said release region at ambient temperatures and comprises poly(methyl acrylate), poly(ethyl acrylate) or poly(butyl acrylate) and wherein said side chain ~~corresponding~~ corresponds to said ~~a~~ hard phase within said release region at ambient temperatures and comprises poly(styrene) or poly(methyl methacrylate).
7. (Withdrawn) The implantable or insertable medical device of claim 1, wherein said main chain corresponds to said hard phase within said release region and wherein said side chains correspond to said rubbery phase within said release region.
8. (Withdrawn) The implantable or insertable medical device of claim 7, wherein said main chain comprises high T_g monomer and wherein said side chain comprises a low T_g monomer.
9. (Withdrawn) The implantable or insertable medical device of claim 7, wherein said main chain comprises a monomer having a glass transition temperature higher than 75°C when in homopolymer form, and wherein said side chain comprises a monomer having a glass transition temperature lower than 0°C when in homopolymer form.
10. (Withdrawn) The implantable or insertable medical device of claim 7, wherein said main chain corresponding to said hard phase comprises poly(styrene) or poly(methyl methacrylate) and wherein said side chain corresponding to said rubbery phase comprises poly(methyl acrylate) or poly(butyl acrylate).
11. (Original) The implantable or insertable medical device of claim 1, wherein said graft copolymer has an elongation at break of at least 25% at ambient temperature.

Serial No.: 10/632,413

12. (Original) The implantable or insertable medical device of claim 1, wherein said polymeric release region further comprises a supplementary polymer in addition to said graft copolymer.
13. (Original) The implantable or insertable medical device of claim 1, wherein said medical device is sterilized using a quantity of radiation effective to kill pathogens.
14. (Original) The implantable or insertable medical device of claim 1, wherein said polymeric release region is a carrier region that comprises said therapeutic agent.
15. (Withdrawn) The implantable or insertable medical device of claim 1, wherein said polymeric release region is a barrier region disposed over a therapeutic-agent-containing region that comprises said therapeutic agent.
16. (Withdrawn) The implantable or insertable medical device of claim 1, wherein said polymeric release region is in the form of a coating layer.
17. (Canceled)
18. (Original) The implantable or insertable medical device of claim 1, wherein said implantable or insertable medical device is adapted for implantation or insertion into the coronary vasculature, peripheral vascular system, esophagus, trachea, colon, biliary tract, urinary tract, prostate or brain.
19. (Original) The implantable or insertable medical device of claim 1, wherein said therapeutic agent is selected from one or more of the group consisting of an anti-thrombotic agent, an anti-proliferative agent, an anti-inflammatory agent, an anti-migratory agent, an agent affecting extracellular matrix production and organization, an antineoplastic agent, an anti-mitotic agent, an anesthetic agent, an anti-coagulant, a vascular cell growth promoter, a vascular cell growth inhibitor, a cholesterol-lowering agent, a vasodilating agent, and an agent that interferes with endogenous vasoactive mechanisms.

Serial No.: 10/632,413

20. (Previously presented) The implantable or insertable medical device of claim 1, wherein said wherein said implantable or insertable medical device is adapted for implantation or insertion into the coronary vasculature or peripheral vascular system.
21. (Previously presented) The implantable or insertable medical device of claim 20, wherein said wherein said implantable or insertable medical device is a stent.
22. (Currently amended) ~~The~~ An implantable or insertable medical device of claim 1 comprising (a) a therapeutic agent and (b) a polymeric release region that controls the release of said therapeutic agent upon administration to a patient, said polymeric release region comprising a graft copolymer, which comprises a main chain and a plurality of side chains, wherein one of said main chain and said side chains corresponds to a rubbery phase within said release region at ambient temperatures, wherein the other of said main chain and said side chains corresponds to a hard phase within said release region at ambient temperatures, and wherein said graft copolymer is selected from polyethylacrylate-graft-polystyrene copolymer, polybutylacrylate-graft-polystyrene copolymer, and polydimethylsiloxane-graft-polystyrene copolymer.
23. (New) The implantable or insertable medical device of claim 6, wherein said medical device is selected from a guide wire, a catheter, a balloon, a vena cava filter, a stent, a stent graft, a vascular graft, a cerebral aneurysm filler coil, a pacemaker lead, a myocardial plug, a heart valve, and a shunt.
24. (New) The implantable or insertable medical device of claim 1, wherein said medical device is a vascular stent.
25. (New) The implantable or insertable medical device of claim 1, wherein said one of said main chain and said side chains corresponding to said rubbery phase comprises a siloxane monomer.
26. (New) An implantable or insertable medical device comprising (a) a therapeutic agent and (b) a polymeric release region that controls the release of said therapeutic agent upon administration

Serial No.: 10/632,413

to a patient, said polymeric release region comprising a graft copolymer, which comprises a main chain and a plurality of side chains, wherein one of said main chain and said side chains corresponds to a rubbery phase within said release region at ambient temperatures, and wherein the other of said main chain and said side chains corresponds to a hard phase within said release region at ambient temperatures, wherein said medical device is a catheter.